

App. No. 09/506,318
Office Action Dated September 20, 2005

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 25 and 51 are hereby amended. Amendments of claims 25 and 51 are supported, for example, by page 14, lines 18-20.

Claims 13, 14, 16-24, 37, 39-50, 63, 65, 67, and 69 were rejected as being anticipated by or, in the alternative unpatentable over Barron (US 6,030,575). Applicants traverse this rejection. Barron does not disclose or suggest a circuit board prepreg including a resin varnish, as required by claims 13 and 39. Rather, Barron discloses a fiber preform (the rejection erroneously equates to the claimed circuit board prepreg) including a binder material and reinforcing fibers. Barron discloses that the preform is suitable for use in preparing a composite article (see, for example, column 1, lines 12-13). Barron discloses that resin is impregnated into the preform during the formation of the final composite article (see column 9, lines 56-57). Therefore the preform itself cannot be considered to include resin. Rather, the preform disclosed by Barron is preformed nonwoven fabric that is put into a mold, in which a resin is injected so as to be molded. The preform itself is an article formed by binding contact points between fibers of a nonwoven fabric by a binder. The preform disclosed by Barron is similar to a sponge, including holes for future filling by injection (see column 1, line 34). After the preform is formed, it may be used in forming a composite article, where the porous preform is filled with resin and the composite is cured.

The claimed circuit board prepreg is obtained by impregnating a nonwoven fabric or a woven fabric with a resin, and drying the combination to an extent that it can be maintained in a semi-cured state. In contrast to the preform disclosed by Barron, the claimed circuit board prepreg is not similar to a sponge including holes, but includes uncured resin impregnated within the spaces between the fibers. When a circuit board is subsequently formed from the circuit board prepreg, copper foils are superimposed on both surfaces of the prepreg and are subjected to heat-pressing from both sides, thereby curing the impregnated resin and providing the dielectric layer of the circuit board.

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Therefore, one knowledgeable in the art would not look to the non-analogous art disclosed by Barron to teach the claimed circuit board preprep. Favorable reconsideration of claims 13, 14, 16-24, 37, 39-50, 63, 65, 67, and 69 is requested.

Claims 22, 25, 26, 28-36, 38, 47, 51-62, 64, 66, 68, and 70 were rejected as being unpatentable over Barron and further in view of Sakai (EP 0807703). Applicants traverse this rejection. Claims 22, 25, 26, 28-36, 38, 64, and 68 should be considered allowable for at least the same reasons as claim 13, from which they depend. Claims 47, 51-62, 66, and 70 should be considered allowable for at least the same reasons as claim 39, from which they depend. Sakai does not remedy the deficiencies of Barron, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 22, 25, 26, 28-36, 38, 47, 51-62, 64, 66, 68, and 70 is requested.

Claims 13, 14, 16-24, 37, 39-50, 63, 65, 67, and 69 were rejected as being unpatentable over Barron in view of Applicants' admitted prior art. Applicants traverse this rejection. The rejection relies on Applicants' admitted prior art to teach a preprep that is semi-cured. However, Applicants' admitted prior art does not remedy the deficiencies of Barron, since Barron is not relevant to prepreps as previously noted regarding claims 13 and 39. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 13, 14, 16-24, 37, 39-50, 63, 65, 67, and 69 is requested.

Claims 22, 25, 26, 28-36, 38, 47, 51-62, 64, 66, 68, and 70 were rejected as being unpatentable over Barron, in view of Applicants' admitted prior art, and further in view of Sakai. Applicants traverse this rejection. Claims 22, 25, 26, 28-36, 38, 64, and 68 should be considered allowable for at least the same reasons as claim 13, from which they depend. Claims 47, 51-62, 66, and 70 should be considered allowable for at least the same reasons as claim 39, from which they depend. Applicants' admitted prior art and Sakai do not remedy the deficiencies of Barron. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 22, 25, 26, 28-36, 38, 47, 51-62, 64, 66, 68, and 70 is requested.

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In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612)455-3804.

Respectfully Submitted,



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